

## ABSTRACT OF THE DISCLOSURE

A processor capable of reducing power consumption of an electronic information device sends a frequency control signal to a clock oscillator, operates at a frequency in accordance with the frequency control  
5 signal. Further, the processor sends a voltage request signal to a power supply circuit, and operates at a voltage in accordance with the voltage request signal. The processor controls the supplied clock frequency and power supply voltage so that the processor itself operates in an operation area in which energy  
10 consumption becomes minimum for a predetermined amount of data. Such an operation area is defined by a clock frequency, a power supply voltage, and power supply efficiency ( $\eta$ ) of the power supply circuit.